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# PENNSYLVANIA BUSINESS SURVEY

College of Business Administration The Pennsylvania State University July 1987

## NO SURGE, NO SLUMP

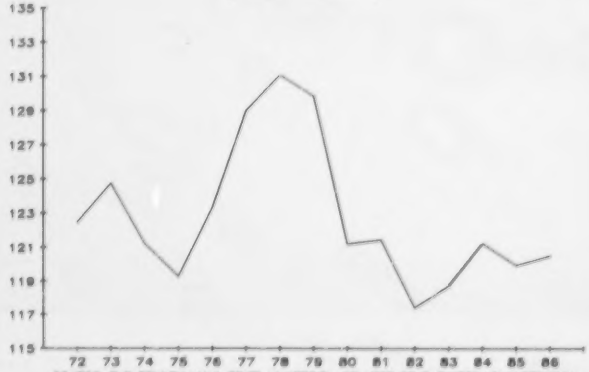
**There were some encouraging signs in the Pennsylvania economy in May, but a quick glance at some of the soft spots and a realization of the "up and down" nature of the Commonwealth's economy lately is enough to temper any outbreak of optimism.** The index of coincident indicators, which is designed to gauge overall trends in current economic activity, registered a 0.7 percent gain. But that follows three months of declines, so it should not be interpreted as evidence of a rebound. Two of the three components of the index, resident employment and real weekly earnings in the manufacturing sector, rose, while the third, manufacturing job levels, declined.

Recent behavior in the real weekly earnings component points to some problems. So far this year, nominal earnings have been just over $400 per week for the average production worker in manufacturing in the State. Real earnings, based on 1967 price levels, have averaged about $120 per week. In other words, $120 in 1967 would have bought the same amount of goods as $400 today. The important point, however, is that **average "inflation-adjusted" earnings today are essentially unchanged from 1972 levels,** the earliest year for which comparable data are available. Although nominal earnings in the manufacturing sector have been on the rise, they have just barely kept pace with price increases over the last several years, resulting in little, if any, gain in real buying power.

The reasons for this behavior are readily apparent in the two accompanying charts. In the mid 1970s, inflation, as measured by the growth in a weighted average of the Pittsburgh and Philadelphia consumer price index numbers, due to the oil price shock, far outpaced earnings growth, resulting in a decline in real earnings. Over a three year period immediately thereafter, earnings growth surpassed price increases, enabling the average worker to more than regain all of the ground lost earlier. However, rising inflation in 1979 and into the early 1980s more than offset earnings growth, resulting in a drop in real earnings. Since then, real earnings have essentially held steady, although there was a slight rise in 1986 and into the first five months of this year. Much the same trend emerges if another measure of inflation is used, say, the gross national product implicit price deflator or the CPI for the U.S. as a whole. Still, this does not tell the whole story. As pointed out in last month's *Survey*, total personal income growth in Pennsylvania has been slightly outpacing price advances, resulting in real gains in purchasing power. At the least, though, **the rather disappointing behavior in the real manufacturing earnings category provides further evidence of the nature of the unbalanced recovery occurring in the Commonwealth.**

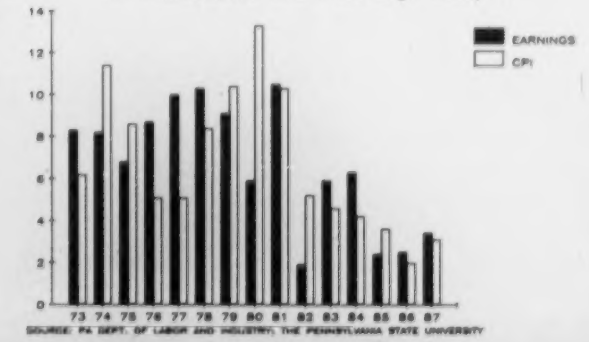
**The increases in manufacturing job levels during recent months, which were mainly the result of the end of the USX work stoppage, have apparently come to an end.** All told, job levels dipped a seasonally adjusted 3,000 during the month to 1,034,000. This is the second consecutive monthly decline after two straight gains and, unfortunately, represents a new all-time low. Normally, manufacturing activity picks up in May, resulting in a rise of about 3,100 jobs on durable goods payrolls and 1,200 jobs in the nondurables sector. In the durable goods area, the increase in jobs did indeed occur, but at 1,900, it was less than expected, resulting in a seasonally adjusted decline of 1,200. On the nondurables side, the loss of 300 jobs given the expected increase due to normal seasonal trends translates into an adjusted decline of 1,500 positions.

REAL WEEKLY EARNINGS BY PRODUCTION WORKERS IN PA'S MANUFACTURING SECTOR
(1967 dollars)




SOURCE: THE PENNSYLVANIA STATE UNIVERSITY, COLLEGE OF BUSINESS ADMINISTRATION

GROWTH IN AVE. WEEKLY EARNINGS BY PROD. WORKERS IN PA'S MFG. SECTOR AND THE CPI
(percent change from year ago; CPI is weighted ave. of Philadelphia and Pittsburgh data)

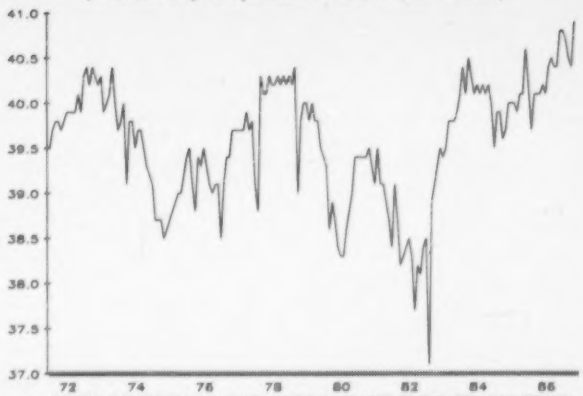



SOURCE: PA DEPT. OF LABOR AND INDUSTRY, THE PENNSYLVANIA STATE UNIVERSITY

A recent study released by the Middle Atlantic Regional Office of the U.S. Bureau of Labor Statistics backs up analyses presented in earlier issues of the *Survey* which showed that manufacturing in Pennsylvania has been especially hard hit by the difficulties facing these industries. The study showed that over half of the states lost manufacturing jobs over the March 1984-March 1987 period. Pennsylvania lost about 85,000 jobs over the period, the second largest decline among all states, trailing only New York's 99,000. In percentage terms, the 7.6 percent decline in Pennsylvania was the fourth largest among all states.

**On a somewhat brighter note, other indicators of manufacturing's health improved during May.** The average factory workweek, total hours worked, and total weekly pay-

PA'S AVERAGE FACTORY WORKWEEK
(seasonally adjusted; hours per week)




SOURCE: THE PENNSYLVANIA STATE UNIVERSITY, COLLEGE OF BUSINESS ADMINISTRATION

| Economic Activity in Pennsylvania | UNADJUSTED DATA | | | SEASONALLY ADJUSTED DATA | | | SEASONALLY ADJUSTED INDEXES (1977 = 100) | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1987 | | 1986 | 1987 | | 1986 | 1987 | | 1986 |
| | *Apr.* | *May* | *May* | *Apr.* | *May* | *May* | *Apr.* | *May* | *May* |
| **Pennsylvania Industries** | | | | | | | | | |
| All nonagricultural industries | | | | | | | | | |
| No. of wage and salary jobs (thous.)[1] | 4,881* | 4,923 | 4,814 | 4,884 | 4,896 | 4,787 | 107.0 | 107.2 | 104.8 |
| Nonmanufacturing | | | | | | | | | |
| No. of wage and salary jobs (thous.) | 3,845* | 3,885 | 3,757 | 3,847* | 3,862 | 3,734 | 119.3 | 119.8 | 115.8 |
| Mining | 31* | 31 | 34 | 31* | 31 | 34 | 65.4* | 64.2 | 70.4 |
| Contract construction | 211* | 224 | 203 | 219* | 222 | 200 | 119.2 | 120.5 | 108.8 |
| Transportation | 136 | 139 | 140 | 138* | 137 | 138 | 85.6* | 85.3 | 85.9 |
| Public Utilities | 105 | 105 | 101 | 105 | 105 | 102 | 104.7 | 104.6 | 101.0 |
| Wholesale trade | 268* | 270 | 259 | 268* | 270 | 259 | 121.1* | 121.7 | 116.9 |
| Retail trade | 849* | 861 | 830 | 859* | 863 | 832 | 119.7 | 120.3 | 116.0 |
| Finance, insurance & real estate | 285 | 287 | 276 | 286 | 287 | 276 | 131.6 | 131.9 | 126.8 |
| Service & miscellaneous | 1,265* | 1,274 | 1,223 | 1,260* | 1,265 | 1,214 | 146.0* | 146.7 | 140.7 |
| Federal government | 139 | 141 | 140 | 139 | 140 | 139 | 108.5 | 109.4 | 108.6 |
| State & local government | 553* | 553 | 551 | 543* | 543 | 541 | 93.2* | 93.2 | 92.9 |
| Manufacturing | | | | | | | | | |
| No. of wage and salary jobs (thous.) | 1,034* | 1,036 | 1,055 | 1,037* | 1,034 | 1,053 | 77.3* | 77.1 | 78.4 |
| Durable goods | 587* | 589 | 603 | 588 | 586 | 600 | 72.6 | 72.4 | 74.1 |
| Nondurable goods | 447* | 447 | 452 | 450 | 448 | 453 | 84.5 | 84.2 | 85.1 |
| Ave. wkly. hrs. worked by prod. workers | 40.2* | 40.7 | 39.9 | 40.4* | 40.9 | 40.1 | 102.3* | 103.5 | 101.5 |
| Total wkly. person-hours worked (mils.) | 28.2* | 28.6 | 28.6 | 28.4* | 28.6 | 28.6 | 73.9* | 74.6 | 74.4 |
| Total wkly. payroll (mil. dols.) | 279.6* | 283.8 | 277.4 | 281.3* | 284.3 | 277.8 | 125.2* | 126.5 | 123.6 |
| Steel production (thous. tons) | 1,035* | 1,078 | 1,021 | n.a. | n.a. | n.a. | 40.1* | 44.3 | 41.8 |
| Industrial electric power sales (mil. kwh) | 3,453 | 3,482 | 3,438 | 3,457 | 3,517 | 3,486 | 93.6 | 95.2 | 94.4 |
| Mining | | | | | | | | | |
| Anthracite coal (thous. net tons) | 363 | 357 | 294 | 458 | 366 | 292 | 93.9 | 74.8 | 59.9 |
| Bituminous coal (thous. net tons) | 5,013 | n.a. | 5,457† | 4,833 | n.a. | 5,250† | 68.5 | n.a. | 74.4† |
| Construction contracts awarded (mil. dols.) | | | | | | | | | |
| Total | 722.3 | 643.7 | 821.3* | 598.5 | 604.3 | 755.2* | 186.0 | 187.8 | 234.7* |
| Residential building | 320.1 | 279.7 | 438.0* | 245.8 | 222.2 | 335.4* | 174.7 | 157.9 | 238.3* |
| Nonresidential building | 229.5 | 198.3 | 211.1* | 225.9 | 239.5 | 259.5* | 208.2 | 220.7 | 239.2* |
| Nonbuilding (utilities and public works) | 172.7 | 165.7 | 172.2* | 126.8 | 142.6 | 160.3* | 126.8 | 196.8 | 221.1* |
| **Employment of Pennsylvania Residents** | | | | | | | | | |
| Employed, no. of persons (thous.) | 5,164 | 5,289 | 5,231 | 5,236 | 5,318 | 5,260 | 109.0 | 110.7 | 109.5 |
| Unemployed | | | | | | | | | |
| No. of persons (thous.) | 295 | 300 | 436 | 306 | 305 | 444 | 76.3 | 76.1 | 110.6 |
| Rate (percentage of labor force) | 5.4 | 5.4 | 7.7 | | | | | | |
| Rate, seasonally adjusted | | | | 5.5 | 5.4 | 7.7 | | | |
| Civilian labor force, no. of persons (thous.) | 5,459 | 5,589 | 5,667 | 5,542 | 5,623 | 5,704 | 106.4 | 108.0 | 109.6 |
| Initial claims for unemployment benefits | 92,138 | 71,631 | 89,903 | 98,661 | 86,882 | 112,904 | 68.9 | 60.7 | 78.9 |

| Consumer Prices, all items | Urban Indexes (1967 = 100) | | | Percentage Change | |
|---|---|---|---|---|---|
| | 1987 | | 1986 | *Month Ago* | *Year Ago* |
| | *Apr.* | *May* | *May* | | |
| U.S. city average | 337.7 | 338.7 | 326.3 | +0.3 | +3.8 |
| Philadelphia | 333.8 | 338.4 | 318.9 | +1.4 | +6.1 |
| Pittsburgh | 338.2 | n.a. | 328.1† | n.a. | +3.1 |

[1] Total includes workers on strike. * = figure revised † = figure for April 1986 n.a. = data not available
SOURCES AND DEFINITIONS OF DATA ARE AVAILABLE ON REQUEST.

rolls all rose from their April readings. At a seasonally adjusted 40.9 hours, the average factory workweek stood at a record high. This indicator moves cyclically with the overall economy. As shown in the accompanying chart, the average factory workweek fell considerably during the recessions of the mid 1970s and early 1980s and rose sharply immediately following each slump. Over the last several months, the workweek has fluctuated quite widely, although the general trend appears to be slightly upward. Normally, the existing workforce puts in longer hours before additional workers are hired. Again, though, in light of the recent erratic behavior in this measure (May's rise follows three straight monthly declines), more time is needed to see if that relationship holds in the future.

**Average daily steel production rose for the third straight month in Pennsylvania following the end of the USX labor dispute.** In fact, the seasonally adjusted 31,100 tons of steel produced in Pennsylvania steel mills per day in May represents the highest level since February 1986. Still, the decline of the steel industry has been quite pronounced in both the Commonwealth and the U.S. (see chart). In fact, output from the Commonwealth's steel mills has been less than one-half of 1977 levels since around mid 1984.

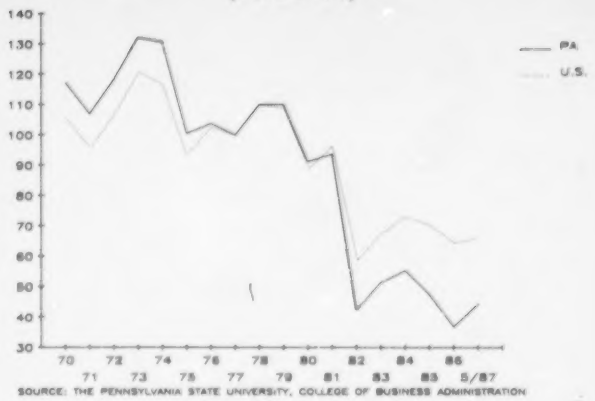
At the national level, a few positive signs have emerged as of late with respect to manufacturing's fortunes. Industrial ouptut and capacity utilization both rose in May. Furthermore, signals of a decline in the U.S. foreign trade deficit are becoming stronger. Much of the improvement is the result of the impact of the declining dollar. At the same time, there are worries that a depreciating dollar may scare off foreign investors from purchasing dollar-denominated securities. If this were to occur, the big fear is that interest rates would have to rise in order to attract adequate funds from abroad to help finance the stubborn federal budget deficit.

As far as the job picture goes, **the nonmanufacturing sector continued to drive economic growth in Pennsylvania during May.** Not surprisingly, the trade and services industries were once again the major contributors. At a seasonally adjusted 1.27 million, there were 5,800 more jobs in the services industries compared to the April reading. So far this year, services jobs have grown at a 4.3 percent clip, a pace considerably stronger than the 2 percent growth rate for all nonagricultural establishments.

The seasonally adjusted 863,000 retail trade jobs in May represent a gain of 4,300 from the previous month. So far this year, retail trade job levels are up 3.4 percent compared to the same period in 1986. As shown in the accompanying chart, **the gains in retail trade jobs have coincided with fairly consistent gains in retail sales in the Commonwealth.**

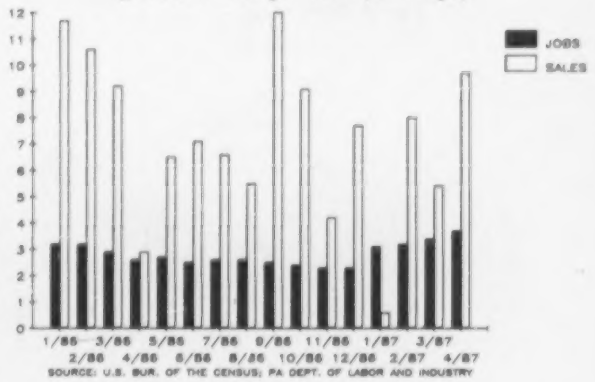
**Based on the value of contracts awarded, the growth in construction activity in Pennsylvania has slowed from a rather hectic 1986.** So far this year, nearly $3.5 billion worth of construction contracts have been awarded in Pennsylvania, an amount essentially unchanged from a year ago. During the first five months of 1986, the year-to-date increase came to 34 percent. However, just the opposite is true when the job picture is considered. During the first five months of 1987, the increase in construction jobs, on an annualized basis, has come to 10.3 percent. For all of 1986, the growth

AVE. DAILY STEEL PRODUCTION IN PA AND THE U.S.
(1977=100)



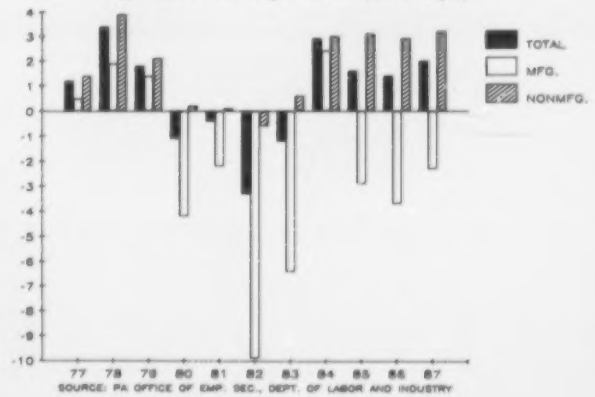

SOURCE: THE PENNSYLVANIA STATE UNIVERSITY, COLLEGE OF BUSINESS ADMINISTRATION

PA RETAIL TRADE JOB GROWTH
AND RETAIL SALES GROWTH
(percent change from year ago)




SOURCE: U.S. BUR. OF THE CENSUS; PA DEPT. OF LABOR AND INDUSTRY

NONAGRICULTURAL JOB GROWTH IN PA
(percent change from year ago)




SOURCE: PA OFFICE OF EMP. SEC., DEPT. OF LABOR AND INDUSTRY

was 8.2 percent.

There was a second consecutive gain in the number of Pennsylvanians counted as employed during May. This helped push down the unemployment rate from a seasonally adjusted 5.5 percent in April to 5.4 percent. May's employ-

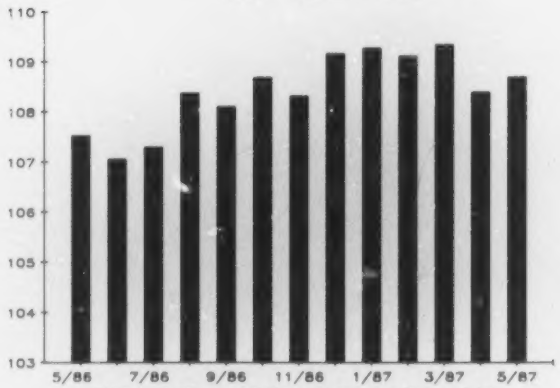
ment gain totalled over 80,000, leaving employment at 5.32 million after adjustment for normal seasonal patterns, a record high. At the same time, the labor force rose by about 80,000 on a seasonally adjusted basis for its second straight monthly advance to its highest level since September 1986. Continued gains in this indicator would be welcome in light of the fact that a growing labor force is usually indicative of a strong economy.

The employment and job picture so far this year is conforming quite nicely to our expectations put forth in the February 1987 "Review and Outlook" issue of the *Survey*. At a monthly average of 5.15 million over the January-May period, **resident employment is up only slightly from the average for the first five months of 1986. Although manufacturing jobs continue to be lost, the decline so far this year has not been as severe as in the past two years (see chart). Nonmanufacturing's job gains have been in line with those of the 1984-1986 period.**

Recent behavior in the Pennsylvania index of leading indicators points to a continuation of the rather erratic economic performance of recent months. This barometer of future economic activity rose 0.3 percent in May after a 0.9 percent drop in April. In that the index has not generated a string of increases, **it is safe to say that economic activity will not accelerate anytime soon. At the same time, the fact that the index is not moving consistently downward indicates that the economy is in little danger of slipping into a full-fledged recession.**

— *William D. Anderson*

PENNSYLVANIA COMPOSITE INDEX
OF LEADING INDICATORS
(Jan 1972=100)




SOURCE: THE PENNSYLVANIA STATE UNIVERSITY, COLLEGE OF BUSINESS ADMINISTRATION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